

My-DAT 8/27/03

L18 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:160051 CAPLUS
DN 142:249031
TI Photoresists with high sensitivity and transparency to deep UV lights or electron beams, polymers therefor, preparation thereof, and method for patterning of them
IN Momose, Akira; Otake, Atsushi; Fujiwara, Tadayuki
PA Mitsubishi Rayon Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 59 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN. CNT 1

DATE

NO

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005048126	A2	20050224	JP 2003-283901	20030731
PRAI	JP 2003-283901		20030731		

L18 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:155786 CAPLUS
DN 142:249027
TI High-resolution photoresists, polymers therefor, preparation thereof, and method for patterning of them by ArF lasers or electron beams
IN Momose, Akira; Otake, Atsushi; Ueda, Shoji; Fujiwara, Tadayuki
PA Mitsubishi Rayon Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 54 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN. CNT 1

NO

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005048128	A2	20050224	JP 2003-283986	20030731
PRAI	JP 2003-283986		20030731		

L18 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:72831 CAPLUS
DN 142:144080
TI Acrylic polymers and radiation-sensitive compositions containing them with excellent solubility to resist solvents
IN Fujiwara, Koichi; Nishimura, Isao
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN. CNT 1

Nb

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005023234	A2	20050127	JP 2003-191566	20030704
PRAI	JP 2003-191566		20030704		

L18 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:203441 CAPLUS
DN 140:261400
TI Radiation-sensitive resin composition
IN Shima, Motoyuki; Ishii, Hiroyuki; Yamamoto, Masafumi; Matsuda, Daichi; Nakamura, Atsushi
PA Japan
SO U.S. Pat. Appl. Publ., 27 pp.
CODEN: USXXCO
DT Patent

my Appl.

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004048192	A1	20040311	US 2003-648243	20030827
	JP 2004334156	A2	20041125	JP 2003-298079	20030822
PRAI	JP 2002-251812	A	20020829		
	JP 2003-112902	A	20030417		
OS	MARPAT 140:261400				

L18 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:84088 CAPLUS

DN 136:119239

TI New copolymers for deep UV workable photoresists with good light transmittance and high sensitivity and resolution and method for forming resist patterns with high aspect ratio using the copolymers

IN Nakamura, Takeshi; Ikegawa, Taeko; Sawano, Atsushi; Doi, Kosuke; Ohara, Hidekatsu

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002030116	A2	20020131	JP 2000-214450	20000714
	TW 556046	B	20031001	TW 2001-90116169	20010702
	US 2002031719	A1	20020314	US 2001-901646	20010711
	US 6517993	B2	20030211		
	DE 10134162	A1	20020425	DE 2001-10134162	20010713
PRAI	JP 2000-214450	A	20000714		

L18 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:624801 CAPLUS

DN 133:215460

TI Positive-working far UV-sensitive resist composition

IN Kodama, Kunihiro; Sato, Kenichiro; Aogo, Toshiaki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000241977	A2	20000908	JP 1999-44978	19990223
PRAI	JP 1999-44978		19990223		

=> d 119 1-6 bib

L19 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:322990 CAPLUS

DN 142:363804

TI Lactone-containing polymers, resist materials containing them with low line edge roughness and excellent resolution, etching resistance, and thermal stability, and pattern formation using them

IN Funatsu, Akiyuki; Nishi, Tsunehiro; Nagura, Shigehiro

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 58 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005097533	A2	20050414	JP 2004-144569	20040514
	US 2005089796	A1	20050428	US 2004-933013	20040901
PRAI	JP 2003-311056	A	20030903		
	JP 2004-144569	A	20040514		

L19 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:120984 CAPLUS

DN 142:177333

TI Acrylic polymers and radiation-sensitive resin compositions

IN Fujiwara, Kouichi; Yamaguchi, Hiroshi; Nakamura, Atsushi

PA JSR Corporation, Japan

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005012374	A1	20050210	WO 2004-JP11143	20040804
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

JP 2005068418

A2

20050317

JP 2004-227547

20040804

PRAI JP 2003-286389

A

20030805

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:120082 CAPLUS

DN 142:228720

TI Norbornane type fluoro compound suitable as additive to chemically amplified type photoresist composition

IN Chiba, Takashi; Hayashi, Akihiro; Shimokawa, Tsutomu

PA JSR Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005035941	A2	20050210	JP 2003-275425	20030716
PRAI	JP 2003-275425		20030716		
OS	MARPAT 142:228720				

L19 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:901010 CAPLUS

DN 141:386367

TI (Meth)acrylic polymers for radiation sensitive resin compositions with good transparency and resist properties and reduced line edge roughness

IN Fujiwara, Koichi; Okamoto, Kenji; Kobayashi, Eiichi

PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 32 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004300403	A2	20041028	JP 2003-290461	20030808
PRAI	JP 2003-73457	A	20030318		

NO

L19 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:855512 CAPLUS
DN 139:343483
TI Radiation-sensitive resin composition
IN Nishimura, Yukio; Ishii, Hiroyuki; Yamamoto, Masafumi; Nishimura, Isao
PA Japan
SO U.S. Pat. Appl. Publ., 26 pp.
CODEN: USXXCO

DT Patent
LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003203309	A1	20031030	US 2003-386707	20030313
	JP 2003337419	A2	20031128	JP 2003-66164	20030312
PRAI	JP 2002-71696	A	20020315		

used In Ref

Yes

L19 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:751284 CAPLUS
DN 139:252530
TI Chemically amplified radiation-sensitive photoresist composition
IN Okamoto, Kenji; Kurokawa, Mitsuo
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003270788	A2	20030925	JP 2002-73000	20020315
PRAI	JP 2002-73000		20020315		

NO

=> d 120 1-3 bib

L20 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:430044 CAPLUS
DN 140:414953
TI Chemically amplified positive-working far-UV photoresist compositions
IN Sato, Kenichiro; Kodama, Kunihiko
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 75 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004151355	A2	20040527	JP 2002-316284	20021030
PRAI	JP 2002-316284		20021030		
OS	MARPAT 140:414953				

NO

L20 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:203441 CAPLUS
DN 140:261400
TI Radiation-sensitive resin composition
IN Shima, Motoyuki; Ishii, Hiroyuki; Yamamoto, Masafumi; Matsuda, Daichi;
Nakamura, Atsushi
PA Japan
SO U.S. Pat. Appl. Publ., 27 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

*my
mail*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 2004048192	A1	20040311	US 2003-648243	20030827
	JP 2004334156	A2	20041125	JP 2003-298079	20030822
PRAI	JP 2002-251812	A	20020829		
	JP 2003-112902	A	20030417		
OS	MARPAT 140:261400				

=>

lzo-Answer 3

L21 ANSWER 1 OF 1 USPATFULL on STN

AN 2004:63674 USPATFULL

TI Radiation-sensitive resin composition

IN Shima, Motoyuki, Tokyo, JAPAN

Ishii, Hiroyuki, Tokyo, JAPAN

Yamamoto, Masafumi, Tokyo, JAPAN

Matsuda, Daichi, Tokyo, JAPAN

Nakamura, Atsushi, Tokyo, JAPAN

PI US 2004048192 A1 20040311

AI US 2003-048243 A1 20030827 (10)

PRAI JP 2002-251812 20020829

JP 2003-112902 20030417

DT Utility

FS APPLICATION

LREP Supervisor, Patent Prosecution Services, PIPER RUDNICK LLP, 1200

Nineteenth Street, N.W., Washington, DC, 20036-2412

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2427

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A radiation-sensitive resin composition comprising (A) a resin comprising at least two recurring units of the formulas (1)-(6) in the total amount of 5-70 mol %, but each in the amount of 1-49 mol %, the resin being insoluble or scarcely soluble in alkali, but becoming easily soluble in alkali by the action of an acid, and (B) a photoacid generator. ##STR1## ##STR2##

wherein R.sup.1 is a hydrogen or methyl and R.sup.2 is a substituted or unsubstituted alkyl group having 1-4 carbon atoms. The resin composition is useful as a chemically amplified resist having high transmittance of radiation, sensitivity, resolution, dry etching resistance, and pattern profile.

IT 670248-62-1P 670248-63-2P

(radiation-sensitive resin composition containing)

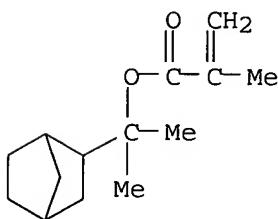
RN 670248-62-1 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-1-methylethyl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate and 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 342014-18-0

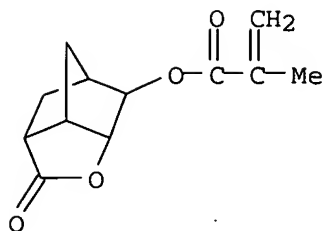
CMF C14 H22 O2



CM 2

CRN 254900-07-7

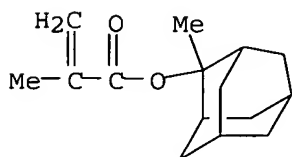
CMF C12 H14 O4



CM 3

CRN 177080-67-0

CMF C15 H22 O2



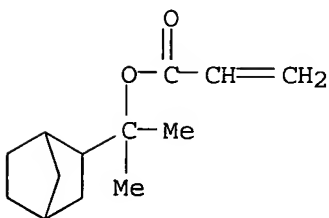
RN 670248-63-2 USPATFULL

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 1-bicyclo[2.2.1]hept-2-yl-1-methylethyl 2-propenoate and 2-ethyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 353275-40-8

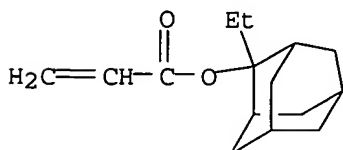
CMF C13 H20 O2



CM 2

CRN 303186-14-3

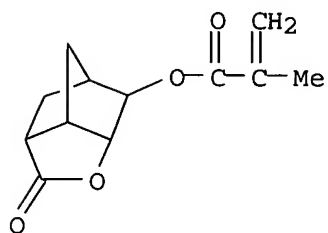
CMF C15 H22 O2



CM 3

CRN 254900-07-7

CMF C12 H14 O4



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(FILE 'HOME' ENTERED AT 19:58:08 ON 25 JUN 2005)

FILE 'REGISTRY' ENTERED AT 19:58:14 ON 25 JUN 2005

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 STRUCTURE UPLOADED
L5 1487 S L1 FULL
L6 145 S L2 FULL
L7 221 S L3 FULL
L8 60 S L4 FULL
L9 7 S L5 AND L6
L10 11 S L5 AND L7
L11 3 S L5 AND L8
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L13 221 S L12 FULL
L14 11 S L5 AND L13

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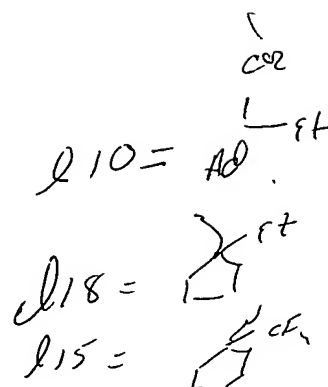
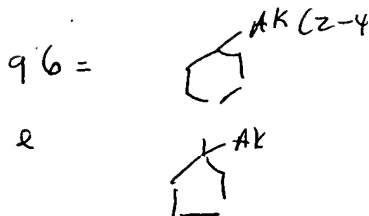
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L20 2 S L11

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FILE 'USPATFULL' ENTERED AT 20:14:26 ON 25 JUN 2005

L21 1 S L11

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ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:84088 CAPLUS

DN 136:119239

TI New copolymers for deep UV workable photoresists with good light transmittance and high sensitivity and resolution and method for forming resist patterns with high aspect ratio using the copolymers

IN Nakamura, Takeshi; Ikegawa, Taeko; Sawano, Atsushi; Doi, Kosuke; Ohara, Hidekatsu

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002030116	A2	20020131	JP 2000-214450	20000714
	TW 556046	B	20031001	TW 2001-90116169	20010702
	US 2002031719	A1	20020314	US 2001-901646	20010711
	US 6517993	B2	20030211		
	DE 10134162	A1	20020425	DE 2001-10134162	20010713
PRAI	JP 2000-214450	A	20000714		

AB The copolymers bear units derived from (meth)acrylic acid 1-(C1-4 alkyl)cyclohexyl esters, unsatd. acid anhydrides, and optionally allyltrimethylsilane or/and 2-(C1-4 alkyl)-2-adamantyl (meth)acrylate, and are used in a photoresist composition containing photochem. acid formers and organic

solvents. Thus, mixing 1-ethyl-1-cyclohexyl methacrylate 7.4 with 2-methyl-2-adamantyl methacrylate 5.3, maleic anhydride 0.9, allyltrimethylsilane 7.3 and AIBN 0.6 in EtOAc 69.4 parts at room temperature for 60 min, heating at 70° for 22 h and working up gave a copolymer with Mw 18,400 and polydispersity 1.54, which was dissolved in propylene glycol monomethyl ether acetate to 7% concentration, mixed at 30 g with 4-(MeO)C6H4(Ph)2S+C4F9SO3- 0.258 g, and filtered to give a photoresist with photo-sensitivity 60 J/cm2, resolution 0.17 µm and focusing deep width 0.5 µm.

IT **391208-99-4P**, Allyltrimethylsilane;1-ethyl-1-cyclohexyl methacrylate;maleic anhydride;2-methyl-2-adamantyl methacrylate copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(new copolymers for deep UV workable photoresists with good light transmittance and high sensitivity and resolution and method for forming resist patterns with high aspect ratio using copolymers)

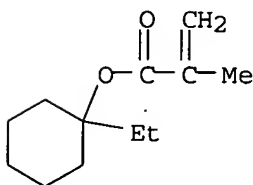
RN 391208-99-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 1-ethylcyclohexyl 2-methyl-2-propenoate, 2,5-furandione and trimethyl-2-propenylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 274248-09-8

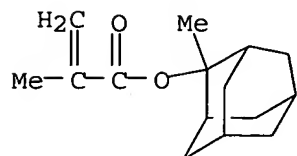
CMF C12 H20 O2



CM 2

CRN 177080-67-0

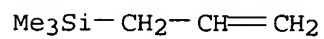
CMF C15 H22 O2



CM 3

CRN 762-72-1

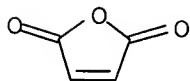
CMF C6 H14 Si



CM 4

CRN 108-31-6

CMF C4 H2 O3



L41 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:675602 CAPLUS
 DN 139:188325
 TI Positive resist composition
 IN Sato, Kenichiro
 PA Fuji Photo Film Co., Ltd., Japan
 SO Eur. Pat. Appl., 76 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1338922	A2	20030827	EP 2003-3244	20030221
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2003241379	A2	20030827	JP 2002-44665	20020221
	US 2003194640	A1	20031016	US 2003-369638	20030221
	US 6824956	B2	20041130		
PRAI	JP 2002-44665	A	20020221		

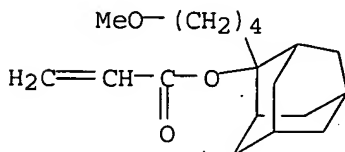
AB A pos. resist composition comprises: (A) a resin which comprises a repeating unit represented by I (R1 = H, alkyl group; A1 = single bond or a linking group; R2 = alkylene group; X = alkoxy group, hydroxyl group), which exhibits an increased rate of dissoln. in an alkali developing solution by an action of an acid; and (B) a compound capable of generating an acid on exposure to active light rays or a radiation.

IT **581799-32-8P**
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (pos. resist composition containing)

RN 581799-32-8 CAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 2-(4-methoxybutyl)tricyclo[3.3.1.1^{3,7}]dec-2-yl 2-propenoate, octahydro-1,2(or 2,3)-dihydroxy-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

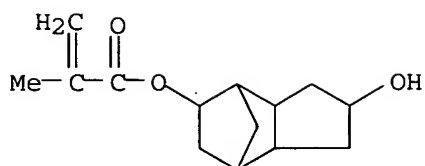
CM 1

CRN 581784-05-6
 CMF C18 H28 O3



CM 2

CRN 309260-42-2
 CMF C14 H20 O4
 CCI IDS

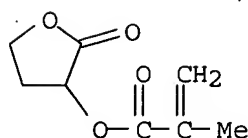


D1-OH

CM 3

CRN 195000-66-9

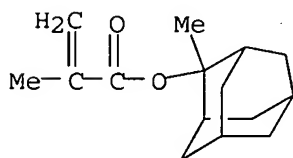
CMF C8 H10 O4



CM 4

CRN 177080-67-0

CMF C15 H22 O2



L41 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:454620 CAPLUS

DN 139:28640

TI Positive-working chemically amplified photoresist composition and method of forming resist pattern from the same

IN Iwai, Takeshi; Kubota, Naotaka; Fujimura, Satoshi; Miyairi, Miwa; Hada, Hideo

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003048861	A1	20030612	WO 2002-JP12524	20021129
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,				

②

not in art

UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2003241385 A2 20030827 JP 2002-201310 20020710
 EP 1452917 A1 20040901 EP 2002-788695 20021129

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

TW 573230 B 20040121 TW 2002-91134954 20021202
 US 2004110085 A1 20040610 US 2003-467130 20030801
 US 2005095535 A1 20050505 US 2004-4798 20041207
 JP 2005128572 A2 20050519 JP 2005-1369 20050106
 JP 2005128573 A2 20050519 JP 2005-1370 20050106

PRAI JP 2001-369341 A 20011203
 JP 2001-382126 A 20011214
 JP 2002-201310 A 20020710
 WO 2002-JP12524 W 20021129
 US 2003-467130 A1 20030801

AB The invention relates to a pos. resist composition comprising (A) a resin ingredient which has ester side chains having an acid-dissociating dissoln.-inhibitive group containing a polycyclic group and has structural units derived from a (meth)acrylic ester in the main chain and which comes to have enhanced alkali solubility by the action of an acid, (B) an acid generator ingredient which generates an acid upon exposure to light, and (C) an organic solvent, the composition being of the chemical amplification

type

wherein the ingredient (A) has both structural units derived from a (meth)acrylic ester and structural units derived from an acrylic ester. This resist composition gives a resist pattern which is reduced in surface roughness and line edge roughness during etching and has excellent resolution and a wide focal-depth range.

IT 537705-97-8

RL: NUU (Other use, unclassified); USES (Uses)
 (resin; pos.-working chemical amplified photoresist composition)

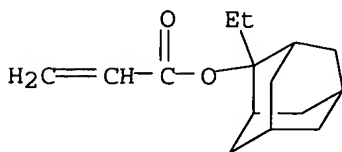
RN 537705-97-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 2-ethyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-propenoate, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate, 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-propenoate, 1-methyl-1-tricyclo[3.3.1.1^{3,7}]dec-1-ylethyl 2-propenoate, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 303186-14-3

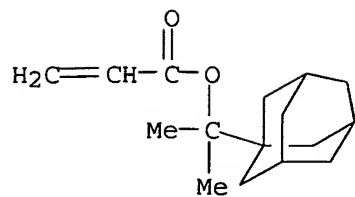
CMF C15 H22 O2



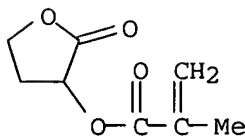
CM 2

CRN 300833-10-7

CMF C16 H24 O2

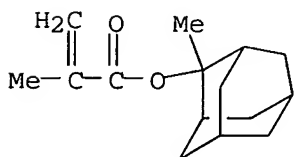


CRN 195000-66-9
CMF C8 H10 O4



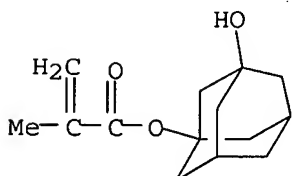
CM 7

CRN 177080-67-0
CMF C15 H22 O2



CM 8

CRN 115372-36-6
CMF C14 H20 O3



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:214743 CAPLUS
DN 138:238854
TI (Meth)acrylic acid copolymers with narrow molecular weight distribution
and their manufacture
IN Matsumoto, Hitoshi; Nakamura, Mitsuhiro
PA Nippon Soda Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003082010	A2	20030319	JP 2001-272949	20010910
PRAI	JP 2001-272949		20010910		

AB The copolymers suitable for ArF excimer laser photoresist base resins, are
manufactured by copolymerizing ≥ 2 (meth)acrylate esters in the presence of
anionic polymerization initiators and 0.1-1.0 equiv mol ratio (based on the

initiators) of mineral acid alkali metal and/or alkaline earth metal salts and have repeating units $\text{CH}_2\text{CR}_1\text{CO}_2\text{AB}$ ($\text{R}_1 = \text{H}$, $\text{C}_1\text{-5 alkyl}$; $\text{A} = \text{single bond}$, ether, ester, carbonyl, alkylene, or their combination; $\text{B} = \text{lactone residue}$) and Mw/Mn 1.01-1.50. Thus, 2-methyl-2-adamantyl methacrylate was reacted with methacrylic acid-5-oxo-4-oxatricyclo[4.2.1.0^{3,7}]nonan-2-yl in the presence of LiCl and sec-butyl lithium to give a polymer showing Mw/Mn 1.29.

IT 501422-53-3P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

((meth)acrylate copolymers with narrow mol. weight distribution and their manufacture with anionic polymerization initiators and mineral acid alkali or alkaline earth metal salts)

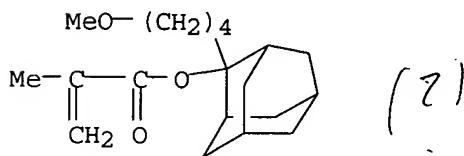
RN 501422-53-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 2-(4-methoxybutyl)tricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate and 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 501422-52-2

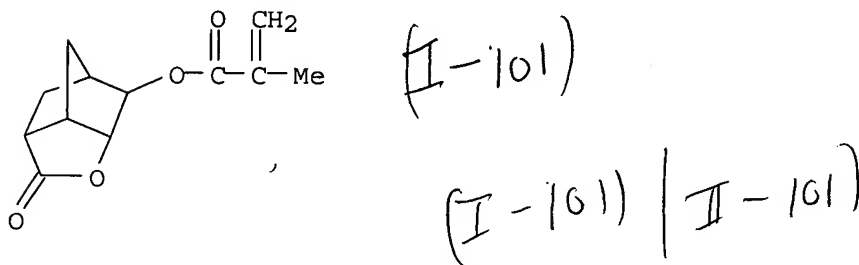
CMF C19 H30 O3



CM 2

CRN 254900-07-7

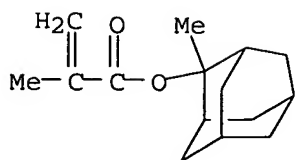
CMF C12 H14 O4



CM 3

CRN 177080-67-0

CMF C15 H22 O2



II 101

L41 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:42890 CAPLUS

DN 138:115058

TI Resist composition and patterning process

IN Kobayashi, Tomohiro; Nishi, Tsunehiro; Watanabe, Satoshi; Kinsho, Takeshi; Nagura, Shigehiro; Ishihara, Toshinobu

PA Shin-Etsu Chemical Co., Ltd., USA

SO U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DT Patent

LA English

FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003013039	A1	20030116	US 2002-170345	20020614
	US 6830866	B2	20041214		
	JP 2003066612	A2	20030305	JP 2002-168143	20020610
	TW 548518	B	20030821	TW 2002-91113198	20020614
PRAI	JP 2001-181079	A	20010615		

AB The present invention relates to a resist composition comprising a hydrogenated product of ring-opening metathesis polymer and a poly(meth)acrylic acid derivative as a base resin. The present invention relates to a resist composition

is sensitive to high-energy radiation, has excellent sensitivity, resolution, and etch resistance, and lends itself to micropatterning with electron beams or deep-UV.

IT 485818-97-1P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoresist composition and patterning process containing)

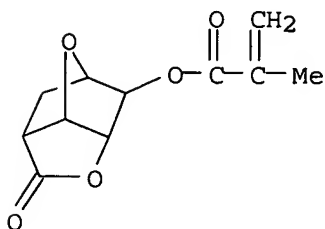
RN 485818-97-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with hexahydro-5-oxo-2,6-methanofuro[3,2-b]furan-3-yl 2-methyl-2-propenoate and 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

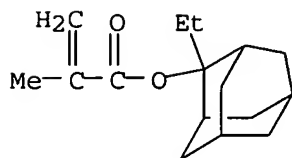
CRN 274248-05-4

CMF C11 H12 O5



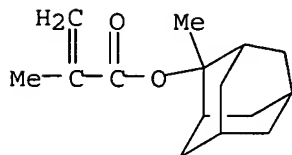
CM 2

CRN 209982-56-9
CMF C16 H24 O2



CM 3

CRN 177080-67-0
CMF C15 H22 O2



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:624801 CAPLUS
DN 133:215460
TI Positive-working far UV-sensitive resist composition
IN Kodama, Kunihiro; Sato, Kenichiro; Aogo, Toshiaki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000241977	A2	20000908	JP 1999-44978	19990223
PRAI	JP 1999-44978		19990223		

AB The pos.-working far UV-sensitive resist composition has a photoacid generator and a resin, which has -O-C(R')(R'')(X-COR) (R', R'' = alkyl, cyclic hydrocarbon; X = single bond, divalent connecting group; R = alkoxy, amide, amino, etc.) group in the side chain, increasing the solubility towards an alkali developer upon reacting with an acid. The composition having the resin is suitable for exposure with ≤ 250 nm far UV light.

IT **290304-63-1P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin in pos.-working far UV sensitive resist composition)

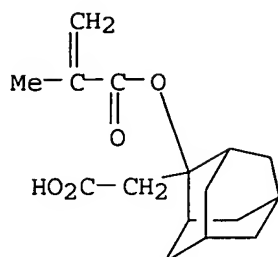
RN 290304-63-1 CAPLUS

CN Tricyclo[3.3.1.1.3]decane-2-acetic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with 1,1-dimethylethyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]tricyclo[3.3.1.1.3]decane-2-acetate and 2-methyltricyclo[3.3.1.1.3]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 290304-39-1

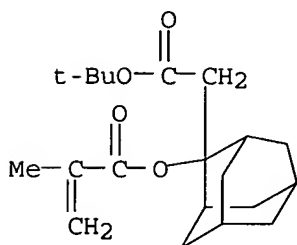
CMF C16 H22 O4



CM 2

CRN 290304-38-0

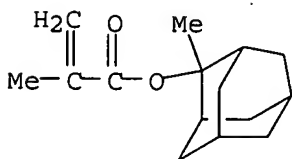
CMF C20 H30 O4



CM 3

CRN 177080-67-0

CMF C15 H22 O2



L41 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:144639 CAPLUS

DN 132:173415

TI Chemically amplified positive photoresist composition

IN Fujishima, Hiroaki; Uetani, Yasunori; Araki, Kaoru

PA Sumitomo Chemical Company, Limited, Japan

SO Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI	EP 982628	A2	20000301	EP 1999-116705	19990825
	EP 982628	A3	20000503		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CN 1245910	A	20000301	CN 1999-111698	19990824
	KR 2000017485	A	20000325	KR 1999-35151	19990824
	JP 2000137327	A2	20000516	JP 1999-238542	19990825
	SG 85129	A1	20011219	SG 1999-4186	19990825
	TW 520463	B	20030211	TW 1999-88114535	19990825
	US 6239231	B1	20010529	US 1999-384032	19990826
PRAI	JP 1998-240143	A	19980826		

AB A chemical amplified pos. photoresist composition, excellent in adhesion to a substrate, good in resist performances, and suitable for exposure using a KrF excimer laser, an ArF excimer laser, or the like, comprises an acid generator and a resin made from a 2-alkyl-2-adamantyl (meth)acrylate and 3-hydroxy-1-adamantyl (meth)acrylate or (meth)acrylonitrile.

IT **258879-99-1P**

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and use in preparing chemical amplified pos. photoresists)

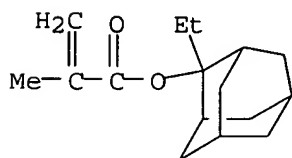
RN 258879-99-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 209982-56-9

CMF C16 H24 O2

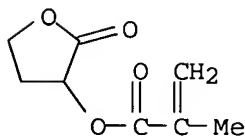


*same as
Kobayashi*

CM 2

CRN 195000-66-9

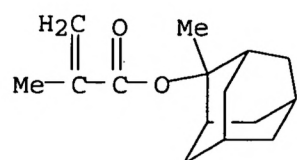
CMF C8 H10 O4



CM 3

CRN 177080-67-0

CMF C15 H22 O2



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L42 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:855512 CAPLUS
 DN 139:343483
 TI Radiation-sensitive resin composition
 IN Nishimura, Yukio; Ishii, Hiroyuki; Yamamoto, Masafumi; Nishimura, Isao
 PA Japan
 SO U.S. Pat. Appl. Publ., 26 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003203309	A1	20031030	US 2003-386707	20030313
	JP 2003337419	A2	20031128	JP 2003-66164	20030312
PRAI	JP 2002-71696	A	20020315		

AB A radiation-sensitive resin composition suitable as a chemical amplified resist useful for microfabrication comprises: (A) a resin insol. or scarcely soluble in alkali, but becomes alkali soluble by the action of an acid and (B) a photoacid generator. The resin comprises at least one recurring unit of the following formula I (R1 = H, methyl; A1 = single bond, X1-COO-; X1 = methylene, alkylene with less with 10 carbon atoms; R2 = C1-6 alkyl; n = 0, 1; R3 = H, C1-6 alkyl, oxygen containing group), II (R4 = H, methyl; A2 = single bond, X2-COO-; X2 = methylene, alkylene with less with 10 carbon atoms; R5 = C1-4 alkyl, C4-20 monovalent alicycli hydrocarbon group).

IT **617711-90-7P**
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (radiation-sensitive resin composition for microfabrication containing)

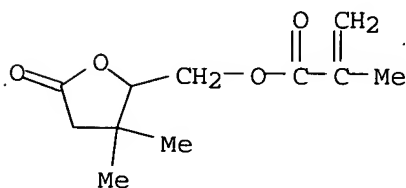
RN 617711-90-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-ethylcyclopentyl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl .
 2-methyl-2-propenoate, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl
 2-methyl-2-propenoate and (tetrahydro-3,3-dimethyl-5-oxo-2-furanyl)methyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

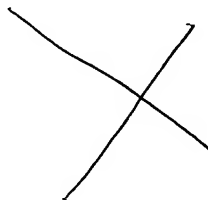
CM 1

CRN 379257-69-9

CMF C11 H16 O4



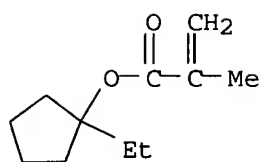
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9don



CM 2

CRN 266308-58-1

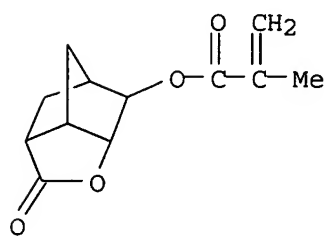
CMF C11 H18 O2



CM 3

CRN 254900-07-7

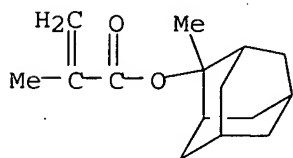
CMF C12 H14 O4



CM 4

CRN 177080-67-0

CMF C15 H22 O2



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bib ab hitstr

L43 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:624801 CAPLUS
DN 133:215460
TI Positive-working far UV-sensitive resist composition
IN Kodama, Kunihiro; Sato, Kenichiro; Aogo, Toshiaki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000241977	A2	20000908	JP 1999-44978	19990223
PRAI	JP 1999-44978		19990223		

AB The pos.-working far UV-sensitive resist composition has a photoacid generator and a resin, which has -O-C(R')(R'')(X-COR) (R', R'' = alkyl, cyclic hydrocarbon; X = single bond, divalent connecting group; R = alkoxy, amide, amino, etc.) group in the side chain, increasing the solubility towards an alkali developer upon reacting with an acid. The composition having the resin is suitable for exposure with ≤ 250 nm far UV light.

IT 290304-61-9P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(resin in pos.-working far UV sensitive resist composition)

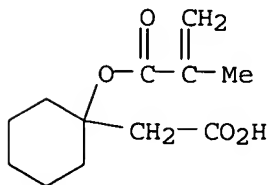
RN 290304-61-9 CAPLUS

CN Cyclohexanecetic acid, 1-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 290304-60-8

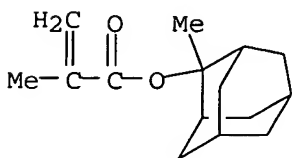
CMF C12 H18 O4



CM 2

CRN 177080-67-0

CMF C15 H22 O2



NO